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Working Paper

Adult Education Perspectives in Primary Health Care Training

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INTRODUCTION

A health worker's continuing education typically includes the presentation of medical and technical information in academic or conference-like environments and often excludes a participatory approach to inservice training. With traditional teaching methods, reading materials are provided, critical lectures are presented, and slides are frequently shown to trainees, with little or no time for skills practice. Following such didactic teaching methods, the health workers are thought to be skilled about the new subject matter and ready to improve and strengthen the quality of health services in their facility and community.

Didactic training methods, however, are *not necessarily effective* when teaching *clinical* skills to health workers. The same can be said for the lack of success when health workers are expected to acquire expertise in *communication* skills following such didactic courses. To effectively work and communicate with people in the communities they serve, health workers need to be trained by the same methods they can subsequently use to teach community members about health care. An argument has been made by many[1-7] that training based on adult education perspectives can be more valuable in improving the effectiveness of health worker training than uncompromising didactic or old-fashioned academic methods. Using adult education methods will encourage health workers to take increased responsibility in their learning process[2] and provide them with a model to use when working with community members.

This paper describes how some adult education methods were integrated into training programs for trainers and health workers over a 12-year period as part of the Africa Child Survival Initiative-Combatting Childhood Communicable Diseases (ACSI-CCCD), referred to as the "CCCD" Project.

THE CCCD TRAINING EXPERIENCE

BACKGROUND

The goal of the CCCD Project was to assist 13 African nations to develop and strengthen three interventions for the improvement of child health: immunization, diarrheal disease, and malaria case management. *Training* was one of five support strategies[a] used to achieve the Project's goals. Other strategies were health education, health information systems, operational research, and health care financing.[8]

At the inception of the CCCD Project in 1981, there was a feeling of urgency to train health workers in the basic skills needed to reduce infant and childhood morbidity and mortality. In each CCCD country, standardized training materials were used and adapted in order to teach correct procedures and provide continuity in training. Classroom-based training courses became the primary way for health workers to maintain, improve, or learn new child survival skills. Evaluation of skills was the exception rather than the rule.

Informal reviews of training programs (including trainers, training materials, and trainees) indicated that health workers failed to perform skills correctly after training. Therefore, a more formal evaluation was put in place:

- In countries where primary health care (PHC) training had not been initiated, baseline information on health worker performance was obtained and later used to evaluate training.
- In countries with ongoing inservice education, facility needs assessments (FNAs) were conducted to see how well health workers were performing case management and other skills following inservice training programs. Assessment results of diarrhea case management in two countries, Malawi and Burundi, showed that health workers trained in the traditional way were not performing a number of essential tasks correctly [Fig. 1].

[a]Sustainability and program management were overriding concerns that were applied to all strategies.

FIGURE 1: HEALTH WORKER CASE MANAGEMENT OF DIARRHEA

Percent* of health workers performing their task correctly following participation in didactic training

	Malawi:1986	Burundi:1987
Asks age	37	75
Weighs child	24	35
Checks skin pinch	24	33
Prescribes ORS	70	83
Gives correct amount of ORS	4	17
Advises to increase fluids	11	34

*Above percentages compiled from CCCD consultant trip reports.

- Trainees were not effectively incorporating new skills into practice once they returned to their jobs. Therefore, as training programs changed and adult education methods were incorporated, FNAs became a standard procedure to measure change in health worker performance as a result of training.[9]
- Skills practice, field experience, and appropriate learning evaluation were encouraged.

ADULT EDUCATION METHODS – TRAINING

In the early CCCD years, training consultants worked with country medical personnel to adapt the curricula and to incorporate basic adult education principles in the program. For example, adult education methods were to include the following: 1) trainers being *trained* as facilitators; 2) trainers valuing and exploring the knowledge and experiences of the trainees; 3) trainers defining the relevance of the training–thus training for health workers was geared toward local problems, perceptions, situations, and available resources; and 4) trainees taking an *active* (rather than passive) role in their training.[2,5-6]

The overall intention was to strengthen and improve three activity areas: 1) *Before* training–planning what health workers need to learn; 2) *During* training–using participatory and skills building methods, and 3) *After* training–providing follow-up visits to reinforce training once the trainees apply newly learned skills to their work environment.

Before Training

One of the early changes in pre-training activities was to encourage health worker trainers to select only those portions of the generic materials that were specifically applicable to the health workers being trained. For example, in one standardized 10-day course, two days were allotted to teaching vaccination coverage assessments. However, since many of the course participants were not the people who would actually conduct such assessments, trainers were encouraged to delete sections of standardized training programs that were not applicable. Thus, training time was used mostly to learn and strengthen relevant skills.

During Training

Guides for facilitators were developed incorporating various adult education methods to teach technical material. These guides replaced the generic or standard materials and were received with a positive response by trainers. For example, the materials in the guides were divided into individual lessons, with learning objectives stated at the beginning of each lesson.[b] Therefore, the trainers and participants knew exactly what they were supposed to accomplish by the end of each new lesson. The learning activities in the guides presented a series of participatory learning activities; skills were explained, demonstrated, and then practiced. Sessions were brought to closure with discussions on *how* learning could be applied to the work place.

[b]Objectives, methods, preparation guidelines, and learning activities were provided for each session in the module. The time required for each activity was clearly stated. Handout materials were also included.

Field visits, too, were a valuable training technique when added to sessions and combined with the work environment. In one course, participants (mid-level managers) were divided into three groups. The objectives of the field visit were to 1) provide an opportunity to practice collecting information through observation, record reviews, and interviews, and 2) collect information on the knowledge and practices of health care providers, mothers, and drug vendors about the treatment of diarrhea and malaria. Trainees usually returned from field visits with an increased understanding of what was taking place within their communities. Their training could then be built on those field experiences and could reinforce discussion, reflection, and future plans–particularly those plans that encouraged better community relationships.

Small group skills practice with peer observation and feedback was another feature of the lesson plans in the training guides. If a skill (such as learning to perform a sick child assessment) was part of the lesson, trainees were given the opportunity to practice and check each other's skills. For example, the facilitator would first find out how the trainee was currently assessing sick children. Then the trainer would explain and demonstrate *how* to do a physical assessment. Finally, a role play would be conducted with the participants divided into groups of three followed by skills practice. One person would play the part of a mother with a sick child, another the health worker, and the third an observer using a checklist to assess health worker performance. After the trainees completed playing their roles, feedback would be provided and the roles exchanged. The lesson concluded with supervised clinical practice. An example of such a lesson plan is shown [Fig. 2].

FIGURE 2: PERFORM A RAPID CLINICAL ASSESSMENT OF A SICK CHILD[c]

OBJECTIVES: At the end of this session, the trainee will be able to assess a sick child by using rapid clinical assessment
a) screen the child and check for danger signs
b) obtain information about the present illness
c) ask about treatment received for the present illness
d) ask standard questions about every sick child
e) verify information with the caretaker
f) conduct the physical examination

METHODS: Lecture, demonstration, return demonstration, role plays, and clinical practice

MATERIALS: Handouts: 1) Lecture *Perform A Rapid Clinical Assessment* 2) Observation Checklist *Rapid Clinical Assessment Of A Sick Child*

PREPARATION: For the facilitator; review the handouts, arrange for a clinic visit, rehearse role play

LEARNING ACTIVITIES: TOTAL TIME: 3 HOURS

INTRODUCTION

1. Conduct a brief role play with two other people.
   Part I: Mrs. Okpo comes to the clinic with her child. She complains that the child has fever. The health worker asks, "How long has the child had a fever?" But the health worker does not ask other questions. The health worker gives the child chloroquine and sends the mother and child away.
   Part II: Two days later the health worker hears two mothers talking: "Mrs. Okpo's child was taken to the hospital the night before and was admitted with pneumonia."
2. Ask the trainees: "What might have been done on the first visit that could have prevented the child from being admitted to a hospital?" Lead a short discussion and stress that the health worker should ask questions and examine every sick child–not just treat children on the basis of the mother's description of illness.

BODY

3. Give a brief lecture on how to perform a rapid clinical assessment.
4. Distribute the handout *Perform A Rapid Clinical Assessment.* Review the components listed and ask trainees to explain (or demonstrate) the difference between normal and abnormal signs.

PRACTICE OR APPLICATION

5. Go to the clinic. If there are any children with signs of disease, have the trainees observe the signs. Demonstrate how to assess a sick child. If there are no sick children, demonstrate by using a well child or a doll.
6. Ask a trainee to repeat the demonstration.
7. Distribute the observation checklist *Rapid Clinical Assessment Of The Sick Child* and explain its use. Divide the trainees into groups of three. In each group, ask one trainee to act as a mother with a small child and another as a health worker. The "health worker" will assess the "child." Using the checklist, the third trainee will observe and provide feedback at the end of the session to the "health worker." Trainees should rotate so each person has a chance to play the role of the health worker.
8. If there are no sick children in the clinic, have the trainees practice assessing well children.

SUMMARY

9. Ask a trainee to summarize the lesson. Review the key points. Explain that the next lesson will be *Provide Case Management for a Sick Child.*

EVALUATION

10. Observe each trainee assess a sick child. Use the observation checklist.

[c]The above Lesson Plan is from: Niger State, Nigeria. The plan is part of a course for local government area (LGA) trainers in CCCD States; 1993.

Incorporating adult education methods into lesson plans and health worker training meant that trainers needed to learn a new approach in "how" to train. Thus, training of trainers (TOT) courses were initiated in several countries. The TOT courses were designed to provide background information about adult learning methods and basic skills in participatory training methods for trainers. The skills were demonstrated to the trainers, who then practiced the teaching methods. The trainers also learned to develop lesson plans using adult education perspectives. This meant lesson plans could be designed (by these same trainers) at a later date for locally identified needs.

In Plateau and Niger States, Nigeria, health workers attended communication workshops where they learned a new approach of working with people in order to solve health problems and promote good health. The workshop strengthened their understanding of what motivates adults to learn.[10] The final steps of their participatory training process included setting goals (how health workers planned to use the communication skills they just learned) and a follow-up meeting (to share how health workers applied their new skills to their work and to discuss modifications they needed to make).

After Training

Follow up to technical training was considered essential in assuring that skills learned by the health worker would be adapted and applied to the job. The concept of supportive supervision was promoted. In several of the countries, supervisors were also the trainers. Two major constraints to successful implementation of supervision were a lack of transportation and time (because of additional supervisory job requirements).

ADULT EDUCATION METHODS – COUNTRY EXAMPLES

As the CCCD Project continued, adult education methods were slowly integrated into health worker training. This meant supporting traditional trainers to change and encouraging donor agencies to invest time and funding for training based on adult education perspectives. Illustrations are provided from five countries.

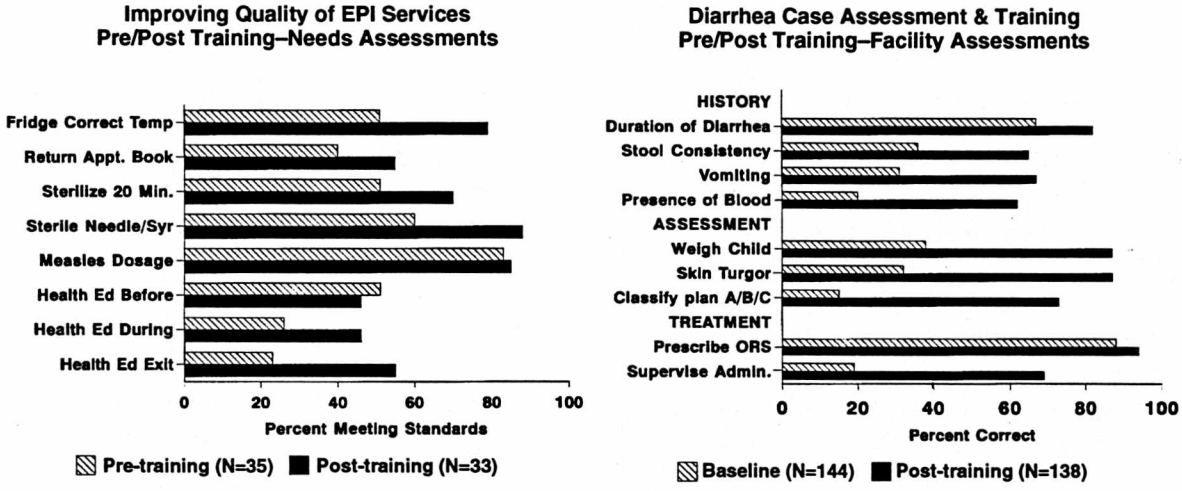
In Nigeria, State Continuing Education Unit (CEU) committees annually advise their CEU staff regarding training *priorities* on the basis of national, state, and local needs assessments. The staff is comprised of experienced health workers who receive an initial two-week course in developing training skills that use adult education approaches. Their training skills are reinforced with annual short courses encouraging them to build on their adult education skills. Multiple approaches to improving health worker knowledge and skills are used. Structured classes with lesson plans help trainees apply newly acquired knowledge and skills to situations in the work setting. These classes include objective structured practical exams as pre- and post-test performance measures, offering another opportunity for practice and immediate feedback. On-the-job supervision reinforces training and provides an opportunity for additional training. Newsletters are published presenting new technical material or reviewing previously learned (but possibly forgotten) information.

Lesotho had an established continuing education system in place prior to the CCCD Project. Their continuing education policy included decentralized training for every Health Service Area (HSA). These HSA trainers are trained in "how to train." Materials used

continue to be participatory in design and emphasize skills practice. For example, when developing acute respiratory infection training materials, the trainers recognized that the group being targeted for training would be experienced nurse clinicians. Thus the materials would need to build on their existing skills. Lesson plans were developed that incorporate skills practice as a major part of the course. Each district continues to plan its training on the basis of the district's training needs assessment, lesson plans are developed based on existing knowledge, and supervisory visits are planned as appropriate.

In the Central African Republic (C.A.R.), there is one central training team and five decentralized training teams (one for each health region). Inservice workshops are developed based on periodic assessments of inservice training needs and training evaluation (in terms of health worker ability and performance). Case studies are used to relate training to health worker experience. For example, post-training evaluation of the training on expanded program on immunization (EPI) and control of diarrheal diseases (CDD) show considerable improvement in health worker performance [Fig. 3].

FIGURE 3: PRE- POST-TRAINING EVALUATION – CENTRAL AFRICAN REPUBLIC (1988-89)

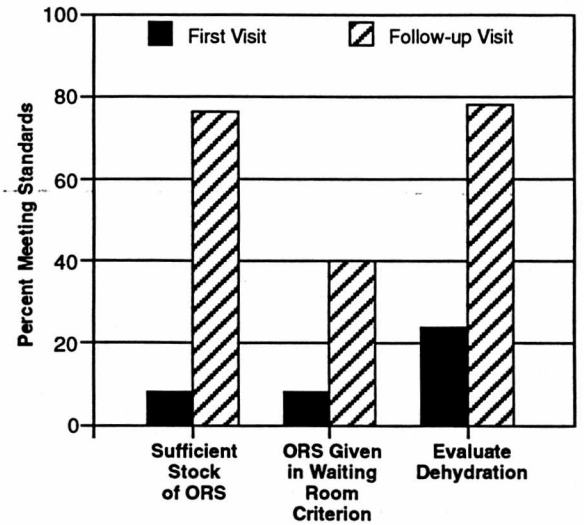


In response to PHC needs, Burundi developed a cadre of "multi-purpose" personnel (PHC trainers) who train workers for many health care functions. Courses are designed so that at least half of the class time is devoted to clinical practice. After each course, the trainers provide follow-up supervision for the newly trained health workers.

Rwanda used trained supervisors to do follow-up and on-the-job training of their health care workers. In this system, supervisors visited each facility every quarter using a check list of nine items.[d] The supervisors entered the facility, greeted the health worker, asked about problems, and checked the nine items from memory. If the health worker's response was appropriate, the worker was commended. If there were identifiable problems, on-the-job training was provided. Supervisory data were computerized and fed back to the facility, district, and national levels. Improvements over the course of one year were some of the best in the CCCD Project [Fig. 4].

[d]Personal communication with CCCD Technical Officer in Rwanda.

FIGURE 4: PERCENT OF HEALTH FACILITIES SHOWING CORRECT CASE MANAGEMENT OF DIARRHEA DURING FIRST AND FOLLOW-UP SUPERVISORY VISITS, 4 REGIONS, RWANDA, 1987.



SUMMARY

Two main lessons have been learned from the training component of the CCCD Project. First, using adult education perspectives in training is one step to assure that clinical and communication skills are better learned and used by health workers and trainers. Second, adult education methods must be incorporated before, during, and after training. In the *preliminary* stage, needs assessments will identify weaknesses and problems faced by health workers on-the-job. *During* training, the trainers must facilitate learning by using more participatory methods such as trainees learning from each other's experiences, reviewing problems from facility-based settings, conducting more field visits, and discussing realistic case studies. Supervisors should be involved in the training or have multipurpose supervisory and training roles. *Following* training, supervisory visits should be supportive (not punitive) and must take place on a regular or routine basis.

If health workers are to work in partnership with community members to improve and strengthen the health status of the community, adult education methods will help them achieve their objectives. Exposure to appropriate participatory training practices will encourage trainees to apply similar approaches in their own work with communities. Using adult education perspectives with community members (such as taking responsibility for their own learning, sharing experiences, and applying them to their environment) can bring increased ownership in identifying and solving health problems.[5,11-14] Didactic training, which was once commonly used, is no longer applicable in preparing people to improve and strengthen their ability to communicate and develop sustainable skills.[15]

Adult education training methods have been developed and used to help adults learn in formal and informal situations for the past three decades. These principles have been successfully applied to management training, as well as in industrial and educational institutions.[16] Donor agencies and MOHs have been somewhat reluctant to fund and support adult education-based training, possibly because of their lack of familiarity with the process and the increased demand on their time. When health care managers support the use of these methods, they will see an improvement in the quality and performance of trained health workers once adult education perspectives are part of the inservice curricula.

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